



FAA

Airworthiness Concern Sheet

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FAA-2006-25581-6

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Make, Model, Series, Serial No.: SOCATA Model TBM-700,
 All TBM 700 A and B aircraft with Nose Landing Gear part
 number 21130-001-02 whose serial number are ranging from
 B168 to B173 inclusive and EUR 174 to EUR 239 inclusive.

Reason for Airworthiness Concern: SOCATA Service
 Bulletin SB-70-147, EASA AD 2006-0226-E, 21 July 2006,
 replace a non-conforming pin which has absence of a heat
 treatment and when broken causes landing gear retraction.

FAA Description of Airworthiness Concern (Who, What, Where, When, How? Attachments: RA and appropriate data) *and*
Request for Information (Proposed Alternate Inspection/Repair Procedures, **Cost Impact**, Etc. Note: Any comments or replies to
 the FAA need to be as specific as possible. Please provide specific examples to illustrate your comments/concerns.):

BACKGROUND:

SOCATA issued Service Bulletin No. SB 70-147, dated July 20063, entitled "Actuating Cylinder Hinge Pin on
 Nose Landing Gear Messier Dowty." SOCATA listed this service bulletin as "Mandatory" for aircraft nose
 landing gear part number 21130-001-02 identified as S/N B168 to B173 and EUR174 to EUR239 installed on
 TBM700 A and B aircraft and/or in stock. Remove and replace actuator hinge pin using replacement kit
 OPT70K-109-32 or OPT70K-110-32. EASA issued Airworthiness Directive (AD) 2006-0226-E, dated July
 2006, to reflect the same information.

CONCERN:

Investigations identified an unsafe condition resulting from an incomplete thermal treatment done on three hinge
 pin batches lowering their mechanical properties resulting in a high risk of deformation under service loads.
 The lower strength of the Nose Landing Gear Hinge Pin rupture can cause an un-commanded nose landing gear
 retraction.

Attachments: *SDR(s) ☐ *A/IDS ☐ *SL(s) ☐ *SAIB ☐ *FAASR/*NTSBSR ☐ *AD ☒ *AMOC ☐ *RA ☐

Notification: FAA ☐ *AOPA ☒ *EAA ☐ Type Club ☐ *TC Holder ☐ Other:

Response Requested 08/31/06__ : Emergency (10 days) ☒ Alert (30 days) ☒ Information (90 days) ☐
 (Space Bar Adds "X" to Check Boxes)

*Service Difficulty Reports (SDRs); Accident/Incident Data System (A/IDS); Service Letter (SL); Special Airworthiness Information Bulletin
 (SAIB); Federal Aviation Administration (FAA)/National Transportation Safety Board (NTSB) Safety Recommendation (FAASR/NTSBSR);
 Airworthiness Directive (AD); Alternate Method of Compliance (AMOC); Risk Assessment (RA); Aircraft Owners & Pilots Association (AOPA);
 Experimental Aircraft Association (EAA); Type Certificate (TC)